SHARIAH PRINCIPLES IN THE PROCUREMENT OF BUILDINGS AND INFRASTRUCTURE WORKS

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ABSTRACT

The construction sector contributes significantly to the economy in three areas: its contribution to the GDP, in employment and its upstream and downstream linkages with other sectors of the economy. However, procurement of building and infrastructure works is yet to embrace the concept of Shariah compliant. Any effort towards making the procurement processes Shariah compliant would go a long way in transforming the country's construction sector to be in compliance with the Shariah. Consequently, a study to review key Islamic principles of al-muamalat related to construction procurement and assessing their applicability in the procurement of building and infrastructure works was carried out. The study used a combination of literature review and intensive discussions with 4 academics specializing in the Shariah and construction works' contracts. The outcome of the study identified key Shariah principles of al-muamalat and identified how they could be applied in the procurement of building and infrastructure works. The study's outcome is considered significant as it contributes towards further and deeper understanding of the concept Shariah compliant construction procurement and increasing the prospect of its application in future projects.

Keywords: Building, Construction, Contract, Al-Muamalat, Procurement, Shariah

Introduction

The construction sector contributes significantly to the economy in three areas: it contributes to the GDP, it provides employment and its upstream and downstream linkages with other sectors of the economy (Khairuddin, 2002). However, the procurement of building and infrastructure works remained conventional as the practice is yet to embrace the concept of Shariah compliant (Khairuddin, 2007: 2008; 2009; Khairuddin and Puteri Nur Farah Naadia, 2017). Activities in the construction sector provides a contrasting scenario to the application of Islamic principles of *al-mu'amalat* in the banking and financial sectors. In the latter the application of Shariah compliant principles is well established.¹

In relation to the procurement of constructed facilities the application of the *al-mu'amalat* in the banking and financial systems enables key players of the construction sector to use Shariah compliant funding and insurance (*takaful*) for their projects. However, other than project funding and insurance (*takaful*), little is known on the practice of Shariah compliant in construction procurement. This in spite of the continuous effort carried out by academics and researchers to promote using the Shariah into the practice of construction procurement (Khairuddin, 2007; Khairuddin, 2008a, 2008b; 2009; Khairuddin and Sharina Farihah, 2014; Khairuddin et al., 2016; Puteri Nur Farah Naadia et al., 2016; Muhammad Ariffuddin et al., 2016).

It is contended herein that any effort towards making the procurement processes Shariah compliant would go a long way in transforming the construction sector's activities to be conducted in line with the requirements of the Shariah. Such transformation becomes critical when buildings and infrastructures are commissioned, funded or targeted for use by wakaf and zakat or for the purpose of ibadah and dakwah such as mosques, suraus, tahfidz, etc. Not only the funding and the end-use aspects are critical but the entire supply chain for the delivery of the buildings and infrastructures must embrace the concept of halalan toyyiban (Khairuddin and Puteri Nur Farah Naadia (2017).

Consequently, a study, reported herein, to review key Islamic principles of *al-muamalat* related to construction procurement and assessing their applicability in the procurement of building and infrastructure works was carried out. The study used a combination of literature review and intensive discussions with 4 academics specializing in the Shariah and construction works' contracts³.

This paper is structured into the following 5 sections. Section 1 introduces the paper. Sections 2 and 3 review the conventional method of construction procurement and Shariah compliant principles of *al-muamalat* and their applicability in construction procurement respectively. In Section 4 data that have been collected from the literature review and discussions with experts are synthesized leading to the outcomes of the study i.e. the identified key Shariah compliant principles of *al-muamalat* are matched with the corresponding process of construction procurement. Finally, section 5 provides a conclusion to the paper.

Conventional Method of Construction Procurement

According to Khairuddin (1998; 2002) and Khairuddin and Samer Shahedza (2014; 2017) the conventional method is the most frequently used in the procurement of building and infrastructures. The conventional method involves the sequential processes of project initiation, funding, design, statutory approvals, tendering, construction and allocation of risks among the project's participants (Table 1). While there are other more modern methods such as the Design and Build (D&B), Turnkey, Management oriented systems and Public Private Partnerships (PPP) but the conventional method remained the most dominant (Khairuddin and Samer Shahedza, 2014; 2017).

Table 1. Conventional method of construction procurement (Khairuddin, 1998; 2002, p.62)

Process	Definition
Initiation	The process of recognising the need for a facility (building or infrastructure)
Funding	The provision of the finance required for the project to be undertaken
Design	The translation of the Client's requirements into drawings, specifications, physical
	and virtual models to facilitate construction
Statutory	The process of obtaining permissions from the various authorities to initiate,
approval	construct and upon its completion to occupy and use the completed facility
Tendering	The process of obtaining offers leading to a contract between a Client and
	Contractor, a Client and Consultant or a Contractor and Subcontractor
Construction	The process of physically fitting the various components of a facility together to
	form a final structure
Risk allocation	The distribution of risks among the parties in the contract

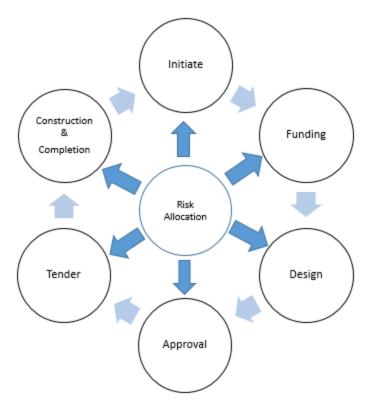


Figure 1. The construction procurement cycle

Briefly and referring to Table 1 and Figure 1, during project initiation and funding the concern of a Client include making sure the project is viable and feasible from the business, technical and social points of view; and that funds are available to sustain the periods between initiation and the time when the facility begins to yield its socio-economic benefits respectively. There is little concern where the funds are sourced as long as the Client is comfortable with the arrangement he is making with his funders or the impact the project has on the end-users and society at large. The key determinant is profit both in monetary and non-monetary terms. In terms of design, the works must be designed by a team of registered professionals (Architect, Engineers, Quantity Surveyor) employed by the Client. Thereafter, the designed works must be approved by the respective authorities including land, planning, building control and the various utility and service providers. Currently, there exist no published guidelines on Shariah compliant building design. Works on the site will be executed by a registered Contractor. The Contractor is almost always selected and appointed through the conventional method of open tendering. During construction, the works is supervised by the same team of professionals mentioned above. In terms of project risks, generally design risks are passed on to the respective professionals, construction risks to the Contractor and the Client carries funding and post completion risks. Consequently, the professionals, Contractor and Client seek protection against such risks through professional indemnity, works and workmen compensation insurances respectively. In addition, risks are also involved upon construction i.e. completed projects. The protection of completed projects against loss and damage are available through specific property insurances. Figure 2 shows the stakeholders in the procurement process.

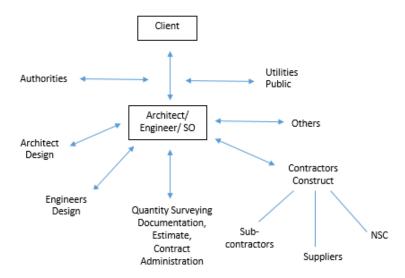


Figure 2. Stakeholders in the procurement process

Working within the ambit of the Contract Act 1950 (Act 136) the rights and obligations of the parties involved in the conventional method of construction procurement are spelled out in the standard form of contract for construction works and related contract documents. The two most dominant standard forms of contract are the PWD 203 (Rev. 1/2010) Standard Form of Contract (for public works) and the PAM 2006 Form of Building Contract (for private building works).

In a nutshell the overriding principles of conventional procurement are efficiency, profit and meeting the requirements of the laws. No attention is given on whether the practice is meeting the requirements of the Shariah or otherwise. In addition, the procurement environment is purely metallic: consideration on the well-beings of the contracting parties, to the works and to the society are lacking. For example, risks and uncertainties that were unknown at the time the contract was signed, aspects on humanity and humility, sharing of risks and rewards, promotion of cooperation among the parties, and on spirituality (instead of material gains alone) received very little direct consideration. Thus, problems including time and cost overruns, incomplete projects, parties went bankrupt or facing financial difficulties and adversaries leading to disputes that require litigation and failures to meet the requirements of the Clients and end-users are not uncommon.

Key Principles of Shariah Compliant Procurement

The concept of Shariah compliant in construction procurement was initially proposed by Khairuddin in 2007 (Khairuddin, 2007; 2008; 2009, p.103). He established the link between *al-mu'amalat* as applied in business transactions with the workings of the construction sector and defined Shariah compliant construction procurement as a process wherein "... the subject matter, terms and nature of the contract or covenant should not be contrary to the Shariah." In addition, Khairuddin (2009, p.106 sourced from Muhammad Rawwas Qal'ahji, 2005) listed the following principles of the *al-mu'amalat* applicable to construction procurement;

- 1. Business transactions are not forbidden unless there is otherwise a *nass* (evidence found in the Quran and *Sunnah*);
- 2. The Shariah should facilitates people in conducting their daily lives (maslahah);

- 3. *Al-ihtikar* (hoarding, black marketeering) and *talaqqi al-rukban* (middle person) leading to deception or inflated prices of goods/commodities are *haram* (forbidden);
- 4. Business transactions involving *riba* (interest charges), trading in alcohol, gambling (*maysir*) and prostitution are *haram* (forbidden);
- 5. *Gharar* (uncertainties) such as gambling, market manipulation and harmful speculation are *haram* (forbidden);
- 6. Monopoly in business transactions must be avoided;
- 7. Business transactions must be conducted with patience, tolerance and with the intention to facilitate, not to constraint;
- 8. The concepts of truthfulness, ethics, integrity and accountability must be upheld at all times;
- 9. Parties in a contract must fulfil their respective obligations (Quran, Al-Ma'idah: 1); and
- 10. All responsibilities and obligations must be discharged to the best of one's ability.

According to Mohd Ma'sum (2006) the foundation of the Shariah on contracts comprises belief in Allah (al-iman), god consciousness (al-tawwakal), knowledge (al-ilm) and sincerity (al-ikhlas). The sources of law are derived from both divine (Quran and sunnah) and non-divine and a contract must involve people as parties thereto. He proposed that as a starting point therefore, a Shariah compliant contract must acknowledge and incorporates these aspects into its subject matter, agreement, terms and the conditions thereto.

Khairuddin (2007; 2008; 2009) reviewed the key types of contracts that are Shariah compliant. Among them is the *Istisna'*, which is essentially a manufacturing contract. He contended the *Istisna'* is appropriate for the construction sector (Khairuddin and Sharina Farihah, 2014 and Khairuddin et al., 2016). However, to make the contract valid the contract documents must reflect the "nature, quality, quantity and the description of the asset to be built" (International Islamic Academy of *Fiqh*'s Decision on *Istisna'* in Syed Alwi, 2007). Consequently, Khairuddin and Sharina Farihah (2014) and Khairuddin et al. (2016) proposed that a set of contract documents must be prepared and the presence of the Bills of Quantities (BQ) is mandatory.⁴

In a related study Khairuddin (2008) examined the contract provisions of the PWD 203A Rev. 10/83 Standard Form of Contract and compared them with the requirements of the *Istisna'*. His study focused 10 key provisions: Formation of contract, Contractor's obligations, Insurances, Third parties such as sub-letting or assignments, the Works, Payments, Liquidated and Ascertained damages, Delay and extension of time, Dispute resolution through Arbitration and Discharging the Contractor from his liabilities under the Contract. His preliminary findings suggest that apart from the provision on Insurances, all other provisions are broadly not contrary to the requirements of the *Istisna'*. Some of the adjustments required include: the contract provisions should be made explicit in terms of the prohibition of *riba*, *gharar*, *maysir*, and that materials to be incorporated into the works must be supplied by the Contractor and not the Client.

In terms of Insurances, the works of Puteri Nur Farah Naadia et al. (2016) pointed out that conventional insurance is *haram* instead the Shariah compliant equivalent or *Takaful*⁵ should be used.

Disputes among the contracting parties are not uncommon. As such, construction contracts do include provisions on dispute resolution including Arbitration. In order to be Shariah compliant, Muhammad Ariffuddin et al. (2016) have come up with a proposal to introduce the concept of *Tahkim* or Shariah compliant arbitration in construction contracts.⁶

Shariah Compliant Construction Procurement

Data collected from the literature review on conventional method of construction procurement and *almuamalat* related to procurement was analysed and synthesized. The synthesizing involved matching the principles of *al-muamalat* with the corresponding process of construction procurement (Table 1 and Figure 1) and thereafter a series of detailed discussions were held with 4 experts on Shariah and construction works contract. The outcome of the synthesis is as shown in Table 2.

Table 2. Infusion of Shariah principles of al-muamalat in the conventional process of construction procurement

Process	Shariah Compliant Principles
Initiation	 Procurement of a facility is not forbidden unless otherwise specified by the nass. Intention to build, end-users and issues on how the built facility contributes towards Maqasid al-Shariah should be given priority. The Shariah should facilitates people in conducting their daily lives (maslahah). Built facilities that promote or involving riba (interest charges), trading in alcohol, gambling (maysir) and prostitution are haram. A Shariah compliant procurement must acknowledge and incorporates into its subject matter, agreement, terms and the conditions the Islamic doctrines that reiterate all of the Islamic belief, practice and value system.
Funding	Funding should be free from <i>riba</i> , <i>gharar</i> and <i>maysir</i> .
Design	 Guidelines on Shariah compliant buildings and infrastructure are lacking. The works' contract should be based on the concept of <i>Istisna</i>' or manufacturing contract. In order to arrive at a clear and unambiguous project's scope and objectives a set of contract documents must be prepared and BQs should be made mandatory.
Statutory approval	• The requirements to obtain approvals from the authorities are consistent with the Shariah.
Tendering	 Al-ihtikar (hoarding, black marketeering) and talaqqi al-rukban (middle person) leading to deception or inflated prices of goods/commodities are haram (forbidden). Gharar (uncertainties) such as gambling, market manipulation and harmful speculation are haram. Monopoly in business transactions must be avoided. Business transactions must be conducted with patience, tolerance and with the intention to facilitate, not to constraint. The concepts of truthfulness, ethics, integrity and accountability must be upheld at all times.
Construction	 Transactions related to construction materials, equipment, services and the likes that involve <i>riba</i> (interest charges) and gambling (<i>maysir</i>) and corrupt practices involving alcohol and prostitution are <i>haram</i> (forbidden). <i>Gharar</i> (uncertainties) such as gambling, market manipulation and harmful speculation are <i>haram</i> (forbidden). <i>Al-ihtikar</i> (hoarding, black marketeering) and <i>talaqqi al-rukban</i> (middle person) leading to deception or inflated prices of goods/commodities are <i>haram</i> (forbidden). Monopoly in business transactions must be avoided. Business transactions must be conducted with patience, tolerance and with the

	 intention to facilitate, not to constraint. The concepts of truthfulness, ethics, integrity and accountability must be upheld at all times. Materials to be incorporated into the works must be supplied by the Contractor and not the Client. At the point of signing a contract, the connection of an offer (ijab) and an
	acceptance (qabul) during a contractual "session" called majlis must be made clear.
	• Parties in a contract must fulfil their respective obligations (Quran, Al-Ma'idah: 1).
	All responsibilities and obligations must be discharged to the best of one's ability.
Risk allocation	• Gharar (uncertainties) such as gambling, market manipulation and harmful speculation are haram (forbidden).
	Effort is needed in order to harmonize the terms and conditions of the currently
	available standard forms of contract with the Shariah.
	Conventional insurance should be substituted with <i>Takaful</i> .

Conclusion

The study has identified key Shariah principles of *al-muamalat* and highlighted how their inclusion into the current conventional procurement practice could transform the latter towards meeting the requirements of the Shariah.

The study's outcome is considered significant as it contributes towards further and deeper understanding of the concept Shariah compliant construction procurement and increasing the prospect of its application in future projects. In meeting this objective further and in-depth studies are required.

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¹ Since its introduction in 1983 and the presence of 16 Islamic banks and 11 Islamic insurance operators (*takaful*), these and the robust regulatory frameworks including the currently enforced Islamic Financial Services Act 2013 (Act 759); and the establishment of the Islamic Financial Services Board in 2003, among others, bear testimony to the practice.

² The Kuala Lumpur International Airport (KLIA) and the New Pantai Expressway (NPE) projects are examples of mega infrastructure projects that used Islamic financing and Islamic debt securities (Khairuddin, 2007).

³ One of the academic is an expert on Shariah. The other 3 are an architect and 2 quantity surveyors.

⁴ BQ is a document that provides the amount of labour and materials required in the execution of the various items of the works. Together these items give the total requirements of the contract. BQs are prepared by Quantity Surveyors.

A review on Takaful and how it differs from conventional insurance hence making it Shariah compliant is not within the scope of this paper. The following references provide brief explanation of *Takaful*: Nasser Yassin and Jamil Ramly. (2011). *Takaful*: A *Study Guide*. Kuala Lumpur: IBFIM and Bank Negara website http://www.bnm.gov.my/index.php?ch=fs mfs&pg=fs mfs bank.

For a full review on *Tahkim*, refer to Muhammad Ariffuddin Arifin et al. (2016). Assessing the Prospect of Using *Tahkim* as a Shariah-Compliant ADR for Resolving Construction Disputes. *JSRAD, Volume 3, Special Issue 2, 2016.*